

## WHAT IS CLAIMED IS:

1. An exercising and sports conditioning mat which assists in correct performance of exercise routines to contribute toward maximizing their benefit while minimizing the likelihood of injury because, of the impact of landing after jumping comprising:

a plurality of layers,

means for connecting said layers to each other to define a stack of layers,

the uppermost layer in said stack of layers including a top surface on which the exercising and sports conditioning is performed,

an intermediate layer comprised of material that will absorb the impact of a jump and thereby minimize the likelihood of injury,

said exercising and sports conditioning being performed on said top surface, and

a plurality of means on said top surface, said means defining a plurality of locations for foot placement before and after jumping routines in exercising and sport conditioning.

2. The mat described in claim 1 wherein  
said top layer is adjacent to said intermediate layer  
in said stack,

a bottom layer, said bottom layer having a bottom  
surface, and

said bottom surface resists sliding on the surface  
which supports said mat so that said mat will not slide from  
under an exerciser who will otherwise fall and risk serious  
injury.

3. The mat described in claim 1 wherein  
said mat has the dimensions of about 42 inches wide by  
about 42 inches long.

4. The mat described in claim 3 wherein  
said mat is about one half inch thick.

5. The mat described in claim 4 wherein  
said mat weighs in the range of about 4.5 to about 5.5  
pounds.

6. The mat described in claim 1 wherein  
said plurality of means on said top surface includes  
a first plurality of elements, and

said first plurality of elements corresponds to a  
plurality of areas for foot placement for exercising and sports  
conditioning.

7. The mat described in claim 6 wherein said first plurality of elements defines a first geometric figure.

8. The mat described in claim 7 wherein said first plurality of elements defines a second geometric figure, and said second geometric figure is within said first geometric figure.

9. The mat described in claim 7 wherein said geometric figure is a rectangular polygon.

10. The mat described in claim 7 wherein said geometric figure is a square.

11. The mat described in claim 9 wherein each corner of said rectangular polygon contains a first group of mutually distinctive components.

12. The mat as described in claim 11 including a second mat, said second mat being the same as said first mat and including a rectangular polygon containing a second group of mutually distinctive components,

the mutually distinctive components in said second group being the same as the mutually distinctive components in

said first groups so that each of said components in said first group is repeated in said second group,

each of said mats having front and rear ends, and  
said mutually distinctive components are arranged on  
said mats so that repeated components which are at the front end  
of one of said mats, are at the rear end of said other mat.

13. The mats as described in claim 12 wherein  
said mats are arranged on a surface with like ends  
facing each other.

14. The mats as described in claim 13 wherein  
said mats are arranged front-to-front.

15. The mats as described in claim 13 wherein  
said mats are arranged rear-to-rear.

16. The mats as described in claim 12 wherein  
said mutually distinctive components are arranged on  
said mats so that repeated components are on the opposite sides  
of said mats when said mats are side by side, and  
are on the same side when said mats are facing in  
matching end-to-end relation.

17. The mat described in claim 9 wherein  
the distance across said rectangular polygon in at  
least one direction is about 18 inches.

18. The mat described in claim 11 wherein said mutually distinctive components are alpha-numeric characters.

19. The mat described in claim 18 wherein mutually distinctive components are contained within distinctive geometric shapes.

20. The mat described in claim 11 wherein said mutually distinctive components are non-repeating numbers.

21. The mat described in claim 11 wherein said mutually distinctive components are arranged to coincide with a stepping or hopping exercise routine.

22. The mat described in claim 21 wherein said mat includes front and rear ends and said mutually distinctive components comprise the numbers 1, 2, 3, and 4, and the numbers 1 and 2 are on one of said ends and the numbers 3 and 4 are on the other of said ends.

23. The mat as described in claim 22 wherein said numbers 1 and 2 are at said rear end, and said numbers 1 and 3 are on the same side of said mat.

24. The mat as described in claim 22 wherein said numbers 1 and 2 are at the front of said mat, and said numbers 1 and 3 are on the same side of said mat.

25. The mat described in claim 9 wherein the distance across said outer rectangular polygon in at least one direction is about eighteen inches, and the distance between said inner and outer polygons is less than the width of the foot of an exerciser.

26. The mat described in claim 1 including a hot melt adhesive for connecting said bottom layer to said layer of shock absorbing material, and said layer of shock absorbing material to said top layer.

27. The mat described in claim 1 wherein said top layer comprises a material that facilitates exercises including the actions of pivoting, jumping, sliding and running.

28. The mat described in claim 27 wherein said top layer is comprised of polyvinyl chloride.

29. The mat described in claim 1 wherein said layer of shock absorbing material is comprised of closed elastomeric cell foam.

30. The mat described in claim 29 wherein  
said layer of shock absorbing material is comprised of  
nitrile butadene rubber/vinyl-nitrile elastomeric foam.

31. The mat described in claim 1 wherein  
said shock absorbent layer reduces stress to the  
muscles, joints, tendons and ligaments on the body of the  
exerciser.

32. The mat described in claim 1 wherein  
said layer of shock absorbing material is anti-  
fatiguing to the body of the user.

33. The mat described in claim 1 wherein  
said layer of shock absorbing material has a quick  
recovery memory so that it returns to its unloaded state even  
during rapid repetitions of jumping routines.

34. The mat described in claim 1 wherein  
said bottom layer is comprised of plasticized vinyl  
coated scrim.

35. The mat described in claim 1 wherein  
said exercising and sports conditioning is jump  
training or the like.